

SHUBIN, G.N. and others. Deformability of transformer s
in cold rolling.
Fiz. Metall. 1(1):180 (1955) (CRL/T. 3975x)

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Effect of Some Metallurgical Factors on the Specific
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Breite Strasse 27
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Vol I, No 1, 1955, pp 180-184.

Brutcher Tr 3627

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Sci - Engineering, Minerals/Metals

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Quality of Transformer Sheet Improved by
Chemically Active Coatings, by N. I. Lepkin

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Vol 1, No 1, 1955, pp 185-92

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Scientific - Min/Metals
Feb 56 CTS/dex

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Khotkevich, V. I., Chalkovskii, E. F., and
Zashkvara, V. V.
ABSORPTION D'ENERGIE LORS DE LA DEFORMATION
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nie Energii pri nizkotemperaturnom Deformirovani
Metallov) tr. by Fedorovskii. 15 Dec 61 (37)p. (Russian
text included) 14 refs. CEA Trans. no. R 1451 (text in
French).

Order from OIS or SLA \$3.60

62-24575

Trans. in French of Fizikal Metallov i Metallo-
vedenie (USSR) 1955, v. 1, no. 2, p. 206-218.

DESCRIPTORS: *Absorption, *Energy, *Deformation,
Metals, Temperature.

(Physics--Solid State, TT, v. 8, no. 3)

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Plastic Strain and Fracture of Single Crystals
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Torsion, by F. P. Rybalko.

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No 2, 1955, pp 251-260.

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Oct 57

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Investigation of the Diffuse Creep of Metals and
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Dec 56 CTS

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Kornev, G. V. and Golubkin, V. N.
DETERMINATION DE LA TENSION DE VAPEURS DU
COBALT ET DU FER A L'AIDE DE RADIOISOTOPES
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19 refs. CEA Trans. no. R 968 (text in French).
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DESCRIPTORS: *Radioactive isotopes, *Cobalt, *Iron,
High temperature research, *Heat of sublimation,
Vacuum apparatus, *Vaporization.

(Metallurgy, TT, v. 6, no. 6)

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No 2, 1955, pp 298-302.

S.L.A. Tr R-289

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Mechanism of Surface Impregnation of Iron and
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Sci - Minerals/Metals, Chemistry

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Sci - Physics
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b. Methods of Calculation for Diffuse-Scattering
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The Ageing of an Al-Cu Alloy, by
M. N. Balinov.

RUSSIAN, per, Fiz. Met. i Metall., Vol I, No 2,
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Sci - Chemistry
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X-Ray and Electron-Microscopic Investigation
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L. I. Podrezov.

RUSSIAN, per, Fiz Metall i Metall, Vol I, No 2, 1955,
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RUSSIAN, per, Fizika Metallov i Metallovedenie,
Vol. I, No 2, 1955, pp 366-367.

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Sci - Minerals/Metals, Chemistry

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Speed of Diffusion of Phosphorus in Steel, by
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Preparation of Pure Metals by Means of the Zone
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Sci - Min/Met

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SLA R-1805

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Effect of Rate and Degree of Plastic Extension on
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DSIR/31316/CT

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Sci - Physics; Min/met
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G. I. Karpov, 12 pp.

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1956, pp 168-171; 172-175. *SLA R-964*

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Sci - Physics; Min/metals
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On the Theory of Ferromagnetism in a Non-Ideal
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Effect of Superheating of Molten Metals upon their
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Stabilization of Austenite at Temperatures above
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K. A. Malyshev, N. A. Borodina, V. A. Mirmel Shtein,
16 pp.

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SIA R-1776

Sci
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Krishnel, M. A.
CALCULATING THE ACTIVATION ENERGY IN
DIFFUSION PROCESSES (K Voprosu ob Opredelenii
Energii Aktivatsii Diffuzionnykh Protsessov). Apr 61
[13], 7 refs. RTS 1610.
Order from OTS or SLA \$1.60

61-19669

Trans. of Fizika Metallov i Metallovedeniye (USSR)
1956 [v. 2] no. 2, p. 303-308.

DESCRIPTORS: *Diffusion, *Cast iron, *Carbon,
Temperature, Velocity, Energy

The equation defining the relation between temperature
and the velocity of processes connected with reactive
diffusion is examined. The results obtained justify the
conclusion that the values of the activation energy of a
complex process calculated by a simple exponential re-
lation cannot always be used as a criterion of the rate-
determining step. A method is indicated for calculating

(Metallurgy--Ferrous Metals, T1), v. 6, no. 3) (over)

- I. Krishnel, M. A.
- II. RTS-1610
- III. Department of Scientific
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Office of Technical Services

Investigation of Diffusion of Boron and Carbon
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Vol II, No 2, 1956, pp 309-319.

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Relief Effects on the Cleavage Surfaces of Zn,
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SUR LA MESURE DE L'EFFET HALL-KIKOINE (On
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3refs. CNRS-X 407.
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(USSR) 1956, v. 2, no. 2, p. 377-388.

DESCRIPTORS: *Ferromagnetism, Ferromagnetic
materials, Measurement, *Hall effect.

- I. Vol'kenshtein, N.V.
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- III. CNRS-X 407
- IV. Centre National de la Recherche Scientifique, Paris

(Physics--Solid State, TT, v. 11, no. 6)

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Tiablikov, A. A. Gusev, 12 pp.

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Sci - Physics
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Sintering of Metal Powder Mixtures in the System
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Investigation of the Structure of a Deformed
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F. M. Bulnov, O. D. Shaskov.

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High-Temperature Oxidation of Titanium in Steam,
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Influence of Interstitial Atoms on the Ordering of an Alloy, by A. A. Smirnov, I. A. Stoyanov, 13 pp.

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N. L. Pokrovskiy, M. Saidov, 6 pp.

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* Morris D. Friedman for Lincoln Lab
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Effect of High Pressure on Thermal Properties of
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Influence of the Ordering Process on the
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Kinetics of Growth of the ~~Diffusion~~ Diffusional
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On the Theory of the Polymorphism of Iron, by V. N. Svecnikov and A. G. Lesnik, 18 pp.

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GB 345

Sci -
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Internal Friction in Deformed Alloys of the α ..
Solid Solution of Aluminum With Magnesium, by A. V
Grin, V. A. Pavlov, 4 pp.

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Henry Bratcher

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Henry Bratcher
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151813

If in the presence of a third element in an alloy the
expulsion rate of the volatile component is increased,
then the compression of the sample is reduced and the
total pore volume is increased. If the expulsion rate
is reduced in the presence of the third element, the
compression of the sample increases and the total
porosity decreases. The parallelism between the in-
fluence of the third element on the expulsion rate and
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